

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): An optical scanning device directing a light beam emitted from a light source to a mirror of a mechanical deflector through a first optical system, deflecting the light beam in a main scanning direction by causing the light beam to be reflected by a mirror surface of said mirror, the angle of said mirror surface changing due to rotation of said mirror, and directing the deflected light beam through a second optical system to a surface to be scanned moving in a sub-scanning direction, said light source, first optical system, mechanical deflector and second optical system being contained in a housing,

wherein said mechanical deflector is directly mounted to said ~~[[house]]~~ housing, and~~[[, also,]]~~ material of said housing has heat conductivity smaller than that of a part of said mechanical deflector in contact with said housing so as to reduce heat transfer from the mechanical deflector to components of the first optical system and of the second optical system through the housing.

Claim 2 (currently amended): The optical scanning device as claimed in claim ~~[[3]]~~ 1, wherein said mechanical deflector is covered by a cover having an optical window, and, thereby, an air flow occurring due to rotation of said mirror is kept within said cover.

Claim 3 (currently amended): The optical scanning device as claimed in claim ~~[[3]]~~ 1, wherein a cooling part forcibly cooling said mechanical deflector is provided.

Claim 4 (new): An optical scanning device comprising:  
a light source configured to emit a light beam;  
a mechanical deflector including a rotatable mirror and a deflector mounting plate;  
a first optical system configured to direct the light beam from the light source to the rotatable mirror;

a second optical system configured to receive the light beam from the rotatable mirror and configured to direct the light beam to a surface to be scanned; and

a housing including a bottom housing plate and configured to support the light source, the mechanical deflector, the first optical system, and the second optical system, wherein,

the deflector mounting plate is mounted to the bottom housing plate such that the deflector mounting plate contacts the bottom housing plate,

the bottom housing plate has a first heat conductivity,

the deflector mounting plate has a second heat conductivity, and

the first heat conductivity is smaller than the second heat conductivity.

Claim 5 (new): The optical scanning device of claim 4, further comprising:

a cover including an optical window and configured to cover the mechanical deflector.

Claim 6 (new): The optical scanning device of claim 4, further comprising:

a cooling unit configured to forcibly cool the mechanical deflector.

Claim 7 (new): The optical scanning device of claim 6, wherein the cooling unit is positioned at an exterior surface of the housing.

Claim 8 (new): The optical scanning device of claim 6, wherein the cooling unit is arranged as one of a cooling fan and a Peltier device.

Claim 9 (new): A method for performing optical scanning, comprising:

mounting a deflector mounting plate of a mechanical deflector directly to a bottom housing plate of a housing;

rotating a mirror of the mechanical deflector to deflect a light beam to a surface to be scanned; and

transferring heat created from a rotation of the mirror through the deflector mounting plate, the bottom housing plate having a heat conductivity smaller than a heat conductivity of the deflector mounting plate.

Claim 10 (new): The method of claim 9, further comprising:  
covering the mechanical deflector to substantially contain an air flow resulting from the rotation of the mirror.

Claim 11 (new): The method of claim 9, further comprising:  
forcibly cooling the mechanical deflector with a cooling unit.

Claim 12 (new): The method of claim 11, further comprising:  
positioning the cooling unit at an exterior surface of the housing.

Claim 13 (new): The method of claim 11, wherein the cooling unit is arranged as one of a cooling fan and a Peltier device.